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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,907	08/23/2001	Michael Schweigert	5369/00007	1006

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EXAMINER

AFTERGUT, JEFF H

ART UNIT PAPER NUMBER

1733

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/935,907

Applicant(s)

SCHWEIGERT, MICHAEL

Examiner

Jeff H. Aftergut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004 and 19 April 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 7-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Prospero et al for the same reasons as expressed in paper no. 10, paragraph 7.
3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 2 further taken with Gruber for the same reasons as expressed in paper no. 10, paragraph 8.

Election/Restrictions

4. Applicant's election of Group I, claims 1-6 in the response dated April 19, 2004 and March 22, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
5. Claims 7-11 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the responses dated April 19, 2004 and March 22, 2004.

Response to Amendment

6. The declaration under 37 CFR 1.132 filed March 22, 2004 is insufficient to overcome the rejection of claims 1-6 based upon Prospero as set forth in the last Office action because: the declaration failed to identify which photographs represent either a wax coated monofilament tape

or coated multifilament and coated monofilament. While the photographs do show different diameter end products being produced, it is not clear which bobbins relate to which processes and what the materials were which were used for each bobbin. The declarant suggested that when the bobbins were exposed to elevated temperatures for prolonged periods of time the bobbins retained their shape and the substantial coatings on the bobbin were free from displacement, however the claims at hand do not recite a post formation heating step or the retention of shape of the bobbin after the winding operation. Additionally, when one applied heat to tack the tapes together during laydown which was admitted as having been performed in the prior art, one would have expected that the tapes would have been tacked together and that the bobbin would have retained its shape after the winding operation. There is no unexpected benefit achieved because those skilled in the art would have expected that the same was attained. Additionally, the sketches which were submitted merely show that as the bobbins get larger the winding speed on the surface of the bobbin is reduced. It is not clear how this supports declarant's posit that the operation as claimed was unexpected, unobvious and/or novel.

Response to Arguments

7. Applicant's arguments filed March 22, 2004 have been fully considered but they are not persuasive.

The applicant argues that one skilled in the art would have understood that there are vast differences between winding a coated monofilament tape onto a bobbin and winding a waxed multifilament yarn onto a bobbin in the manufacture of a dental floss bobbin. The applicant takes the position that the teachings of Prospero are therefore irrelevant to the claimed invention

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because the dental floss being wound throughout the reference is a string of waxed thread. These arguments are not well taken.

To begin with, the reference to Prospero et al stated that:

“The term “dental floss” as used herein, is defined to include both dental flosses, dental tapes and any similar article.” (emphasis added. Column 1, lines 25-27)

and additionally stated at column 3, lines 41-45 that:

“Although the preferred embodiment of the present invention is described in connection with a waxed dental floss, it will be understood by those skilled in the art that the present invention may be used in conjunction with any other types of waxed threads or yarns.” (emphasis added).

Thus, the reference to Prospero suggested that one skilled in the art would have understood that the process and apparatus defined therein would have been useful for processing a dental tape. The applicant is additionally advised that the “coated monofilament dental tape” of the claimed invention was an admittedly known dental tape. Additionally, as expressed in the rejection as presented in paper no. 10, the admitted prior art additionally suggested that it was known at the time the invention was made to wind the dental tapes upon bobbins under tension and under such conditions that the tape was tacked to the previously wound layers on the bobbin, however there were recognized problems associated with the winding operation which included one’s inability to maintain uniform tension upon the tapes as well as improper conditioning of the tapes for achieving the desired degree of tack. The reference to Prospero suggested a means for maintaining uniform tension during the winding operation on a bobbin for a dental floss which was a coated dental floss (note that in the admitted prior art the monofilament tapes are coated tapes). Additionally, Prospero provided for heating of the tensioning mechanism whereby the coating on the dental floss was not removed and did not form a residue on the tensioning

mechanism. The applicant is advised that the use of the tensioning mechanism of Prospero with the known coated monofilament dental tapes would have been obvious to one of ordinary skill in the art at the time the invention was made not only to facilitate uniformity in the tension of the tapes as they are wound but also to eliminate build up of the coating on the tensioning mechanisms.

The applicant also addresses the submitted declaration. The arguments relating to the declaration are noted above and applicant is referred to the same for a complete discussion of this subject.

Regarding the reference to Gruber, the applicant argues that the reference relates to winding a thermoplastic coated yarn where the thermoplastic coating is heated above the melting point but below the degradation temperature and that heating to this degree would have displaced the coating on the dental tape and rendered it ineffective. The applicant is advised that it was known in the dental tape art to condition the tape to tack it to the previously applied windings as discussed in the background of the invention. Additionally, the applicant is advised that the reference to Prospero suggested that the guide mechanism which was the tensioning means was heated to prevent the build up of the coatings upon the mechanism. Note further the Prospero suggested that the tensioning mechanism would have been useful for other types of coated yarns or threads. In a like manner, Gruber suggested heating the guide to prevent build up of the material on the guide. Additionally, to ensure the tacking of the coated yarn in Gruber at the mandrel (or bobbin), the reference applied conditioning means at the point of laydown of the yarn on the bobbin (i.e. heating). While the reference did envision melting the coating, one viewing the same would have readily appreciated that when tacking a coated monofilament tape

to a bobbin that it would have been desirable to apply only the heat which was necessary to ensure good tack between the previously applied layer and the freshly applied layer and it would have been within the purview of the ordinary artisan to determine the optimum temperature for such processing as a function of the type of coating applied to the dental tapes.

For a discussion of the dependent claims, the applicant is referred to paper no. 10, paragraph 7.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

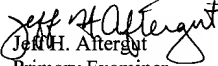
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeff H. Alferdy
Primary Examiner
Art Unit 1733

JHA
May 25, 2004